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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/523,686

08/11/2005

Satoshi Iyanagi

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EXAMINER

KNABLE, GEOFFREY L

ART UNIT

PAPER NUMBER

1791

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DELIVERY MODE

06/25/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/523,686	<b>Applicant(s)</b> IYANAGI ET AL.	
	<b>Examiner</b> Geoffrey L. Knable	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 17-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-16 and 22-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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1. Claims 4 and 17-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 7/25/2008.

In view of applicant's reference to paragraph [0014] in the specification as supporting what is described in claim 4, it is apparent that claim 4 is not generic to the elected embodiment but rather is restricted to the non-elected "third" embodiment. Note especially paragraph [0150] in the specification where the apparatus features corresponding to this "means" are described (no such corresponding features are described for the elected "first" and "second" embodiments). Claim 4 has therefore been regrouped with the non-elected claims.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Mallory (US 4,007,081) or Mallory et al. (US 3,833,445 - newly cited).

With respect to claim 1 as amended, Mallory '081 is applied for substantially the same reasons as set forth in the last office action with respect to claims 1 and 2 (much of previous claim 2 being incorporated in claim 1). With respect to the last two lines of claim 1 requiring that the center bladder is "expandable or contractible independently of the movement of the rigid support members, both in axial and radial directions", note first that the pistons (124) that can effect movement of the rigid support members (46, etc.) are separate from the means (164/168/170) to effect axial movement of the carrier

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(106) that supports side ends of the bladder (216). Independent axial movement capability is therefore present. As to independent radial movement capability, this does *not* at present require that any actual means are provided to be able to effect this expansion/contraction but rather simply that the bladder is expandable/contactable, i.e. is capable of being expanded/contracted. As the bladder is sufficiently resilient to be expandable (as evidenced by the motion imparted from figs. 18-19), the bladder is *capable of* for example being gripped from for example some outside suction device and thereby expanded, this being an expansion/contraction in a radial direction independently of the movement of the rigid support members. Claim 1 is therefore still anticipated by Mallory '081.

Mallory et al. '445 discloses a tire building drum including a pair of bead locks (70) that can be expanded and contracted, as well as movable towards and away from each other (e.g. see figs. 11+), carcass band folding back means (184) and a center shaft (32). Further, the drum includes a core body (e.g. 8) axially inside the bead locks and including rigid support members toroidally disposed and adapted to be expanded/contracted (e.g. figs. 11+). A center bladder (36) radially outside the core body and which moves axially integrally with the bead locks is also provided. Further, the bladder is expandable/contractible by inflation (e.g. col. 12, lines 1-16), this inflation/deflation capability being independent of movement of the core body (e.g. fig. 18 and col. 12, lines 46-49). Mallory therefore anticipates claim 1. As to claim 2, note the interleaved comb type engagement of the adjacent support members (e.g. fig. 8 and

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col. 4, lines 24-34). As to claim 3, the bead locks are connected to axially movable pistons (114) through links (e.g. 99). .

4. Claims 5-7, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mallory (US 4,007,081) or Mallory et al. (US 3,833,445 - newly cited) as applied above, and further in view of DE 2124978 to Gazuit and Gutknecht et al. (US 6,318,434) as applied in the last office action.

The secondary references are substantively applied with respect to newly cited Mallory et al. '445 for the same reasons as set forth in the last office action with respect to Mallory '081, it being noted that the two Mallory reference are directed to generally very similar drums with corresponding features.

5. Claims 8-16, 25, 26, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mallory (US 4,007,081) or Mallory et al. (US 3,833,445 - newly cited) (or for claim 27 only, further in view of DE 2124978 to Gazuit and Gutknecht et al. (US 6,318,434)) as applied above, and further in view of Gazuit (US 3,767,509) or GB 1524369 to Gazuit as applied in the last office action.

The secondary references are substantively applied with respect to newly cited Mallory et al. '445 for the same reasons as set forth in the last office action with respect to Mallory '081, it being noted that the two Mallory references are directed to generally very similar drums with corresponding features.

6. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mallory (US 4,007,081) or Mallory et al. (US 3,833,445 - newly cited) as applied to claim 1

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above, and further in view of Frazier et al. (US 3,684,621) and Irie (US 4,468,267) as applied in the last office action.

The secondary references are substantively applied with respect to newly cited Mallory et al. '445 for the same reasons as set forth in the last office action with respect to Mallory '081, it being noted that the two Mallory references are directed to generally very similar drums with corresponding features.

7. Claim 28 rejected under 35 U.S.C. 103(a) as being unpatentable over Mallory (US 4,007,081) or Mallory et al. (US 3,833,445 - newly cited) as applied above, and further in view of Gazuit (US 3,767,509) or GB 1524369 to Gazuit as applied to claim 25 above, and further in view of Stevens (US 2,605,197) as applied in the last office action.

Stevens is substantively applied with respect to newly cited Mallory et al. '445 for the same reasons as set forth in the last office action with respect to Mallory '081, it being noted that the two Mallory references are directed to generally very similar drums with corresponding features.

8. Applicant's arguments filed 3/24/2009 have been fully considered but they are not persuasive.

The previous 35 U.S.C. 112 rejections have however been withdrawn in view of applicant's response. Also, as noted above, in view of applicant's response, claim 4 was regrouped with the nonelected claims. In particular, in view of applicant's reference to paragraph [0014] in the specification as supporting what is described in claim 4, it is apparent that claim 4 is not generic to the elected embodiment but rather is restricted to the non-elected "third" embodiment. Note especially paragraph [0150] in the

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specification where the apparatus features corresponding to this “means” are described (no such corresponding features are described for the elected “first” and “second” embodiments). Claim 4 is therefore restricted to the non-elected species corresponding to the described “third” embodiment and has therefore been regrouped with the non-elected claims.

With respect to the prior art rejections, it is argued that the only way the Mallory ‘081 drum sleeve can be expanded or contracted is through the use of the drum 45. While it would be agreed that Mallory ‘081 does not provide a separate means (such as inflation) to expand or contract the bladder, the claims as amended do not require a provision of means to expand or contract the drum bladder. Rather, all that is required is a *capability* of the drum bladder to be expanded/contracted. As noted in the statement of rejection, this could conceivably come in the form of an external suction device that could grip the bladder from the outside and expand or contract it. Nothing in the present claims requires anything more. Note also the newly cited Mallory ‘445 reference which provides a drum with core bodies very similar to that of Mallory ‘081 but also that explicitly includes an ability to inflate the center bladder as well.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mallory (US 3,833,444) is another example of including inflation capability in a drum with core bodies (note esp. arrows in fig. 15 and col. 10, lines 31+). It is also noted that previously applied Mallory (US 4,007,081) illustrates similar arrows in fig. 23 but these are not further discussed.

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10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Geoffrey L. Knable/  
Primary Examiner, Art Unit 1791

G. Knable  
June 22, 2009